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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/926,124	09/06/2001	Kazuaki Ishioka	210099US2PCT	6126
22850	7590	10/28/2004	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			GHEBRETINSAE, TEMESGHEN	
			ART UNIT	PAPER NUMBER
			2637	

DATE MAILED: 10/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/926,124

Applicant(s)

ISHIOKA, KAZUAKI

Examiner

Temesghen Ghebretinsae

Art Unit

2637

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-4 is/are allowed.
- 6) ☒ Claim(s) 5-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 September 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 12/07/01, 12/26/01.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

### **DETAILED ACTION**

1. It would be of great assistance to the Office if all incoming papers pertaining to a filed application carried the following items:

1. Application number (checked for accuracy, including series code and serial no.).
2. Group art unit number (copied from most recent Office communication).
3. Filing date.
4. Name of the examiner who prepared the most recent Office action.
5. Title of invention.
6. Confirmation number (See MPEP § 503).

### ***Information Disclosure Statement***

2. The IDS filed, 12/7/01, 12/26/01; and 8/06/02 have been considered by the examiner.

### ***Claim Objections***

3. Claims 1,3 and 4 are objected to because of the following informalities: in claim 1, line 13, "said" should be ---an---; in claim 1, page 61, line 13, 'producing' should be ---generating---; in claim 3, line 2 and line 7, "producing unit" should be ---generating unit--; in claim 4, line 2, "producing unit" should be ---generating unit---. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 5 recites the limitation "the first RAKE –combination signal detecting step" in line 16 and 24. There is insufficient antecedent basis for this limitation in the claim.

6. Claim 5 recites the limitation "the calculated deviation" in line 19. There is insufficient antecedent basis for this limitation in the claim.

7. Claims 6-7 are rejected based on the rejected base claim.

***Allowable Subject Matter***

8. Claims 1-4 are allowed.

9. Claims 5-6 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

9 The following is a statement of reasons for the indication of allowable subject matter: the prior art of record fails to anticipate or render obvious the claimed spread spectrum reception apparatus comprising: a rake combination unit including a plurality of inverse spread units; a combining unit which RAKE combines the signal inverse spread by the inverse spread units; a delay unit which delays the inverse spread codes supplied to the inverse spreading units based on a delay control signal input from outside; and RAKE combination signal detection unit including: a delay profile generation unit which generates a delay profile with a correlation electric power value obtained by converting a correlation value of the spread spectrum signal and interference spread code into an electric power and delay time; a correction coefficient storing unit which stores already calculated correction coefficient based on time correlation between interference and thermal noise by each deviation of the delay time; a delay profile correction unit which measures a deviation between a delay time of signal whose correction electric power value is maximum and delay time of signal in the delay profile and corrects a correlation electric power value in the delay profile using a

result obtained by multiplying a correction coefficient read from the correction coefficient storing unit corresponding to the measured deviation by a maximum electric power value in the delay profile; and a signal detection unit which detects a signal whose correlation electric power value becomes maximum in the delay profile produced by the delay profile generating unit to output a delay time of the detected signal as a first delay control signal and a delay time of signal whose correlation electric power value becomes a maximum in the corrected delay profile corrected by the delay profile correction unit as a second delay control signal to the delay unit in the manner and complexity explicitly claimed in claim 1.

### ***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Sato (US2001/0050950) and Shou et al (5,974,038) are cited to show a spread spectrum receiver comprising a RAKE combination unit.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Temesghen Ghebretinsae whose telephone number is 571-272-3017. The examiner can normally be reached on Monday-Friday from 8 to 6. The examiner can also be reached on alternate

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel, can be reached on 571-272-2688. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

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published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Temesghen Ghebretinsae  
Primary Examiner  
Art Unit 2637

T.G.

10/26/04.

TEMESGHEN GHEBRETINSAE  
PRIMARY EXAMINER

10/27/04